

Pages 10, after Table 1, please insert the following paragraph:

93 Key for Table 1: (1) OBJ stands for object plane; (2) IMG stands for image plane; (3) RDY stands for radius; (4) THI stand for thickness; (5) RMD stands for reflective; (6) GLA stands for glass sort; (7) CAF-UV stands for Ca₂F, ultraviolet grade; (8) NAO stands for numerical aperture at object side; (9) DIM stands for dimensions in millimeters; (10) WL stands for wavelength; and (11) REFRACTIVE INDICES gives the refractive index of CaF₂ taken as given quantity for the calculation.

IN THE CLAIMS

Please amend the following claims and add the following claims pursuant to 37 CFR 1.121 (a marked up copy of the claims is enclosed).

ay 6. (Amended) A microlithographic reduction projection catadioptric objective having an object side and an image side, consisting in sequence from the object side to the image side of a catadioptric group providing a real intermediate image, a catoptric or catadioptric group as a whole providing a virtual image, and a dioptric group providing a real image.

as 17. (Amended) The objective of claim 1, wherein the most imageward mirror is convex.

35. (Newly Added) A microlithographic reduction projection catadioptric objective having an object side and an image side, comprising more than two curved mirrors and no more than one optical element that is a cut off section of a body of revolution, consisting of, in sequence from the object side to the image side, a catadioptric group providing a real intermediate image, a catoptric or catadioptric group providing a virtual image, and a dioptric providing a real image.

Q 6 36. (Newly Added) The objective of claim 12, wherein no more than one optical element deviates substantially from disk form.

37. (Newly Added) The objective according to claim 2, comprising, in sequence from the object side to the image side, a field lens group, a catadioptric group comprising one or more negative lenses and a concave mirror, generating axial chromatic aberration, a group comprising an odd number of curved mirrors, and a positive lens group.

38. (Newly Added) The objective of claim 2, wherein the most imageward mirror is convex.

39. (Newly Added) The objective of claim 4, having an object side and an image side, wherein a most imageward mirror is convex.

40. (Newly Added) The objective of claim 6, wherein a most
imageward mirror is convex.

41. (Newly Added) The objective of claim 7, wherein a most
imageward mirror is convex.

42. (Newly Added) The objective of claim 8, wherein a most
imageward mirror is convex.

43. (Newly Added) The objective of claim 10, wherein the most
imageward mirror is convex.

44. (Newly Added) The objective of claim 11, wherein the most
imageward mirror is convex.

45. (Newly Added) The objective of claim 12, having an object
side and an image side, wherein a most imageward mirror is convex.

REMARKS

Claims 1-45 are pending in the present application with claims 35-45
having been added.